AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of claims

1-5. (Canceled)

6. (Currently Amended) A method for producing poly-beta-hydroxybutyrate ~~(PHB)~~, said method comprising ~~the steps of~~:

(i) isolating ~~the DNA sequence coding for the~~ a nucleic acid encoding a poly-beta-hydroxybutyrate ~~(PHB)~~ biosynthetic pathway[[,]] from *Streptomyces aureofaciens* NRRL2209,

(ii) cloning ~~the DNA sequence coding for PHB pathway~~ said nucleic acid into a plasmid vector ~~pGEM-3Z~~ to obtain a ~~multicopy~~ recombinant vector ~~designated as pSa240~~,

(iii) transforming *Escherichia coli* JM109 with ~~the plasmid vectyor pSa240~~ said recombinant vector to obtain recombinant *Escherichia coli* JM109 bearing accession No. PTA1579 which expresses poly-beta-hydroxybutyrate ~~and harbouring the gene responsible for production of PHB~~, ~~and~~

(iv) culturing said recombinant *Escherichia coli* JM109 in a conventional medium ~~containing~~ comprising glycerol and

(v) recovering said poly-beta-hydroxybutyrate from said recombinant *Escherichia coli* JM109.

7. (Currently Amended) ~~A method as claimed in~~ The method according to claim 6 wherein[[,]] the nucleic acid ~~fragment coding for~~ encoding the poly-beta-hydroxybutyrate ~~synthesis~~ biosynthetic pathway is a 4.826 Kb ~~long~~ fragment.

8. (Canceled)

9. (Currently Amended) ~~A method as claimed in~~ The method according to claim 6 wherein[[,]] the ~~DNA sequence coding for PHB pathway is cloned into the~~ plasmid vector is a multicopy plasmid vector ~~named pGEM-3Z~~.

10. (Currently Amended) ~~A method as claimed in~~ The method according to claim 6 wherein[[,]] the recombinant ~~plasmid~~ vector ~~harbouring the gene coding for PHB pathway~~ is pSa240.

11. (Currently Amended) ~~A method as claimed in~~ The method according to claim ~~6~~ 10 wherein[[,]] the *Escherichia coli* JM109 is transformed ~~with the multicopy plasmid vector pSa240~~ at a temperature in the range of 14°-18°C in the presence of T4 DNA ligase enzyme.

12. (Canceled)

13. (Currently Amended) ~~A method as claimed in~~ The method according to claim 6 wherein[[,]] the ~~transformed~~ recombinant *Escherichia coli* JM109 ~~when cultured in medium containing glycerol expresses the said biosynthetic pathway gene by producing~~ produces poly-beta-hydroxybutyrate in recoverable quantities of at least about 60% (w/w) of the recombinant *E. coli* JM109 dry cell mass ~~of the *Escherichia coli* JM109 bacterial host~~.

14. (New) The method according to claim 6, wherein the nucleic acid comprises the sequence of SEQ ID NO. 1.

15. (New) The method according to claim 9, wherein the multicopy plasmid vector is pGEM-3Z.